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RANDOM NOTES ON THE NOMENCLATURE OF
THE CHIROPTERA.

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A careful examination of the names of bats now in common use shows that many changes must be made before the nomenclature will be placed on a stable basis. Some of these changes have already been pointed out by Miller in his recent revision of the Vespertilionidæ.* But errors no less glaring still pass current in other families, and it is the purpose of this paper to call attention to a few which have come to light while compiling a list of the family and generic names of Chiroptera.

Bats are now usually divided into six families: Emballonuridæ, Nycteridæ, Phyllostomatidæ, Pteropodidæ, Rhinolophidæ, and Vespertilionidæ. A rigid adherence to the rule of priority requires a change in at least two of these names, as well as in the designations of several subfamilies, genera, and species.

NOCTILIONIDÆ (Emballonuridæ).

The free-tailed bats received the commonly accepted name of Emballonuridæ from Dobson in 1875.† Gray, however, in 1821‡

*North American Fauna, No. 13, 1897; Ann. & Mag. Nat. Hist., 6th ser., XX, p. 379, 1897. Most of the references to generic and specific names were furnished Mr. Miller by the Biological Survey of the U. S. Dept. of Agriculture, the generic names forming part of my forthcoming index to the genera of mammals.

†Ann. & Mag. Nat. Hist., 4th ser., XVI, p. 347, Nov., 1875.

‡London Medical Repository, XV, p. 299, Apr. 1, 1821.

proposed the term Noctilionidæ based on another genus of the same family, and this name having priority of more than half a century should be adopted instead of Emballonuridæ.

The genus *Saccopteryx*, according to Dobson, contains 4 subgenera, one of which, *Centronycteris*, was based on *Vespertilio calcaratus* from Brazil. This species was named by Wied in 1821,* but is preoccupied by *Vespertilio calcaratus* Rafinesque† described in 1818, a North American species belonging to another family. Since the Brazilian bat now known as *Saccopteryx calcarata* does not seem to have received any other specific name, it may be called ***Saccopteryx wiedi*** in honor of its discoverer, Maximilian, Prince of Wied.

MEGADERMATIDÆ (Nycteridæ).

The family Nycteridæ, also named by Dobson in 1875, contains but two genera, *Megaderma* and *Nycteris*, each the type of a distinct subfamily. Harrison Allen published the name Megadermatidæ in 1864‡; Peters used the term Megadermata as early as 1865, and Gill adopted it in a modified form Megadermidæ, in 1872. Although Harrison Allen merely used the name incidentally for a genus which is now known to belong to another group, there can be no doubt as to the genus on which it was based. Consequently there seems to be no reason why Megadermatidæ should not be adopted for the family, since it has 11 years' priority over Nycteridæ.

PHYLLOSTOMATIDÆ.

Several changes in current generic names of leaf-nosed bats are also necessary. *Anoura* Gray, 1838, should replace *Glossonycteris* Peters, 1868, as recently shown by Thomas and Trogessart; *Phylloderma* may be antedated by *Guandira*; and *Lophostoma* must give way to *Tonatia*. The Cayenne Bat, called *Phylloderma stenops* by Peters in 1865,§ was previously named *Guandira cayanaensis* by Gray in 1843, but apparently was not described until 1866 ||

* Schinz, Das Thierreich, I, p. 180, 1821.

† Am. Monthly Mag., III, p. 445, Oct., 1818.

‡ Mon. Bats North Am., p. XXIII, 1864.

§ Monatsber. K. Preuss. Akad. Wiss., Berlin, p. 513, 1865.

|| List Spec. Mamm. Brit. Mus., p. 194, 1843; Proc. Zool. Soc. London, 1866, p. 114.

and therefore remained a nomen nudum until one year after the appearance of Peters' description. If Gray has anywhere described the species prior to 1866, his name *Guandira* will of course take precedence over *Phylloderma*.

Lophostoma D'Orbigny,* is antedated at least nine years by *Tonatia* Gray, 1827. *Lophostoma* was based on *L. sylvicolum* (= *Phyllostoma amblyotis* Wagner, 1843), and according to Dobson, contains two other species—*Vampyrus bidens* Spix and *Lophostoma brasiliense* Peters. *V. bidens*, however, is the type of *Tonatia* Gray. The genus was published in volume V of Griffith's Cuvier, Animal Kingdom, as follows: "*Vampyrus*, it is understood, was long ago appropriated by M. Geoffroy (in a MS. communication to Dr. Leach) as a generic name to *V. spectrum* of Linnæus; but Spix in his splendid work on the animals of Brazil, now publishing, has adopted it for three species there described, the *Cirrhus*, *Soricinus*, and *Bidens*. *** Mr. Gray proposes *** to divide the three species of Spix's genus *Vampyrus* above mentioned into two genera, the one under the name *Istiophorus*, including *Cirrhus* and *Soricinus*, and the other under that of *Tonatia*, including *Bidens* only."†

PTEROPODIDÆ.

Among the fruit-eating bats, changes are inevitable in the well-known genera *Macroglossus* (or *Carponycteris*), *Cynonycteris* (or *Xanthopygia*), *Harpyia*, and *Cephalotes*. *Macroglossus*, preoccupied in Entomology, was replaced in 1891 by *Carponycteris*, Lydekker. This latter name is antedated by *Kiodotus*, proposed in 1840 by Blyth,‡ who had previously discovered that *Macroglossus* was not available, and suggested a Latinized form of the common name as a substitute. The adoption of *Kiodotus* necessitates a new name for the subfamily Macroglossinæ or Carponycterinæ, which may be called **Kiodotinæ**. This subfamily includes the

* First published on plates of D'Orbigny's 'Voyage dans l'Amerique meridionale,' which were distributed separately in 1836. In 1838 Gray quoted the genus with a brief diagnosis, merely mentioning the species by name. The specific name, however, dates from 1847, the year when the text accompanying the plates appeared.

† P. 71, foot-note, 1827.

‡ Cuvier's Animal Kingdom, 69 footnote, 1840; new ed., 69 footnote, 1849. The first edition not seen; Mr. F. H. Waterhouse, Librarian of the Zoölogical Society of London, has kindly verified the reference for me,

genera *Callinycteris*, *Eonycteris*, *Kiodotus*, *Melonycteris*, *Nesonycteris*, *Notopteris*, and *Trygenycteris*.

The genus known as *Cynonycteris* by Peters and Dobson, and as *Xantharpyia* by Lydekker, must give way to *Rousettus* Gray, 1821,* which has more than 20 years' priority. *Rousettus* was based on *Pteropus aegyptiacus*; *Xantharpyia* Gray, 1843, included *P. amplexicaudatus*, *P. aegyptiacus*, and *P. stramineus*; and *Cynonycteris* Peters, 1852, had for its type *P. collaris*. As all these species are now considered congeneric, it is simply a matter of selecting the earliest name.

Harpyia is preoccupied in Entomology, and in the case of *Cephalotes* an unfortunate transfer of the name must be made similar to that of *Vespertilio*, to which Miller has already called attention. *Cephalotes* and *Harpyia* are closely related, and may therefore be considered together. *Cephalotes* was proposed by Geoffroy in 1810† for two species, *Cephalotes peronii* Geoffroy, from the island of Timor, and *Cephalotes pallasii* Geoffroy, a new name for *Vespertilio cephalotes* Pallas. Illiger in the following year, 1811, based his *Harpyia* on *Vespertilio cephalotes*. But, as already stated, *Harpyia* is preoccupied in Entomology, since Ochsenheimer selected it in 1810 for a group of European moths and gave a detailed description of the genus and several species in his work entitled 'Die Schmetterlinge von Europa' (vol. III, p. 19). *Harpyia* is therefore not available either for the bat or the eagle, to which it has so long been applied. Even were this not the case, it could hardly claim recognition, as it is in reality merely a synonym of *Cephalotes*.

It may be claimed that Geoffroy did not name the type of his genus *Cephalotes*, and under the rule that the first reviser of a genus has the right to fix the type when none has been designated by the original describer, Illiger could select *Vespertilio cephalotes* as the type of *Harpyia* (thus leaving *Cephalotes peronii* as the type of the genus *Cephalotes*), and his verdict would be final. Certain it is that he has been followed by Temminck, Gray, Dobson and others, until *C. peronii* has become almost universally associated with *Cephalotes* and *V. cephalotes* with *Harpyia*. It may well be questioned whether the type of *Cephalotes* was really left in uncertainty, and whether Illiger deliberately

* London Medical Repository, XV, p. 299, Apr. 1, 1821.

† Ann. Mus. d'Hist. Nat. Paris, XV, pp. 101-108.

'fixed' it, or, not having seen Geoffroy's paper,* simply based *Harpyia* on *Vespertilio cephalotes*, which he recognized as distinct from other species of *Vespertilio*. The original description seems to leave little doubt that Geoffroy intended *cephalotes* and not *peronii* as the type of his genus, for he says: "Nous donnons ce nom à la céphalote de Pallas et à une nouvelle espèce du voyage aux terres australes, qui ont une très-grande affinité avec les rousettes, mais qui en diffèrent assez pour ne pouvoir être comprises dans le même genre" (p. 101). Again: "Pallas m'a fourni le nom de céphalote" (p. 104). If this is not conclusive, it is only necessary to refer to Isidore Geoffroy's explanation of the case,† in which he calls attention to Illiger's transposition of the type, stating that *Vespertilio cephalotes* was actually the type of *Cephalotes*, and that Geoffroy afterwards perceiving that *cephalotes* and *peronii* were generically distinct proposed *Hypoderma* for the latter species. He says: "Ce genre [*Cephalotes*], établi par Geoffroy Saint-Hilaire, a pour type une espèce très-remarquable par son système dentaire, le *Vespertilio Cephalotes* de Pallas. * * * Depuis cette époque, de nouvelles observations ont démontré la nécessité de séparer ces deux Chauve-Souris, semblables à quelques égards, mais différant l'une de l'autre par de nombreux et importans caractères. Cette séparation a été effectuée par Geoffroy dans un travail publié tout récemment (Leçons sténog.), où le groupe peu naturel des Céphalotes est partagé en deux genres, l'un conservant le nom de *Cephalotes*, c'est celui qui a pour type le *Vespertilio Cephalotes*; l'autre nommé *Hypoderma*, c'est celui qui a pour type la Céphalote de Péron. * * * Quelques auteurs, ayant déjà senti la nécessité de séparer les deux Céphalotes, ont proposé de donner le nom d'*Harpyia* créé par Illiger, à la véritable Céphalote, le *Vespertilio Cephalotes* de Pallas, et de transporter le nom *Cephalotes* à l'espèce de Péron." *Hypoderma*, like *Harpyia*, is preoccupied in Entomology,‡ and since no other generic name seems to have been proposed for *Cephalotes peronii*, a new name is required for the

* Illiger does not refer to the paper or to Geoffroy's species *Cephalotes peronii*.

† Dict. Classique d'Hist. Nat., XIV, p. 706, 1828.

‡ According to Agassiz the name was proposed by Clark, in 1815, in his 'Essays on the Bots of Horses and other Animals.' I have been unable to find the name in this paper, but it was subsequently used by Latreille in 1825, in his 'Fam. Nat. du Règne Animal,' V, p. 503.

group. The genus may therefore be called **Dobsonia** in honor of the late Dr. George E. Dobson who devoted much attention to the study of the Chiroptera.

Thomas has recently adopted *Uronycteris* to replace *Harpyia*,* but this name was based on *Cynopterus albiventer* Gray, which, according to Dobson, is synonymous with *Vespertilio cephalotes*. *Uronycteris* is therefore a synonym of *Cephalotes* Geoffroy. Transferring *Cephalotes* to the species to which it really belongs, the forms usually referred to it will stand *Dobsonia peronii* (Geoff.) and *Dobsonia minor* (Dobson), while those usually placed in *Harpyia* will stand, *Cephalotes cephalotes* (Pallas) and *Cephalotes major* (Dobson).

* *Novitates Zoologicae*, II, p. 163, 1895.